

# Improving Compliance with Screening Mammography Guidelines in an Insured Population by Initiating a Mobile Mammography Program to Increase Access in a Metropolitan Area

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## Recommended Frequency of Screening Mammography Continues to be Debated

- Annual screening mammography endorsed by:
  - American Cancer Society
  - American College of Radiology
  - Society of Breast Imaging
  - American College of Obstetricians & Gynecologists
  - Our institution's breast imaging faculty & staff

## Recommended Frequency of Screening Mammography Continues to be Debated

- The United States Preventative Services Task Force (USPSTF) recommends screening mammography every two years

Whichever screening mammography guideline you support, many women are not in compliance

- Even women whose health insurance covers screening mammography
- Even women in metropolitan areas where access to screening mammography facilities is NOT limited

## Background

- The American Cancer Society says lack of time is the number one reason that women do not undergo annual mammograms.
- Onitilo et al found: “Time to the nearest mammography center was predictive of missing mammograms.” (Am J Roentgenol. 2013 Nov; 201(5):1057-63).

## Purpose of Our Quality Improvement Project

- To improve compliance with screening mammography guidelines in an insured population in a metropolitan area by increasing convenience of access to screening mammography with a new mobile mammography program

## Mobile Mammo Program's Goal

- To improve utilization of screening mammography by increasing convenience and minimizing travel time for women who may not undergo screening mammography as frequently as is recommended

## Our Mobile Mammography Coach



The Pink Life Saver

## Mobile Mammo Program

- Established December 2012
- Operates in urban metropolitan area
- No differences in insurance requirements from those at our hospital's breast imaging center
- Is in contrast to mobile mammography programs created to service women in rural communities or uninsured

## Mobile Mammography Coach

- Full-field digital mammography
- One mammographic technologist
- Driver who also serves as the registrar

## 1<sup>st</sup> Three Months of Operation

- Coach visited 4 outpatient primary care clinics in the metropolitan area that are owned by our hospital with one day per week spent at each clinic .
- Radiologists & staff made informational visits to providers at these clinics.
- On days when the coach was at each clinic, a sign indicating that the coach was on site, and that walk-ins were welcome, was displayed in the clinic.

## After 3 months...

- Added coach visits by request to:
  - Grocery stores
  - Local businesses for their employees
  - Community special events
- Weekly visits to each of our outpatient clinics continued

## Subsequently...

- Number of patient visits at each outpatient clinic & special event were tracked.
- Based upon utilization, the number of coach visits to each site in the upcoming month was adjusted.

## Data Collection

- IRB approval for electronic medical record review.
- Review of the electronic medical record revealed which mammograms performed on the coach led to a diagnosis of breast cancer.

## Data Collection

- Date of last mammogram was obtained from electronic medical record if prior mammogram was performed at our institution.
- If performed at an outside institution, date was obtained from outside institution images received for comparison during the interpretation process.
- Otherwise, used patient's recollection of the date of her last mammogram.

## Results after 13 months

- 1253 women underwent screening mammography on the mobile coach
- 7 breast cancers were found:
  - 5 invasive ductal carcinomas
  - 1 invasive lobular carcinoma
  - 1 ductal carcinoma-in-situ



## Results

- Of 1253 women screened on the coach:
  - 1175 (97.5%) had not undergone mammography in the past year
  - 657 (54.6%) had not undergone mammography in the last two years
  - Median time since prior mammogram : 1.9 years.
  - Longest time since prior mammogram: 24 years

## Results

- Of 1253 women screened on the coach:
  - 163 (13%) were baseline mammograms

## Results

- Of 1253 women screened on the coach:
  - 277 (22.1%) at special events
  - remainder at the primary care clinics
  - 372 (29.7%) of women screened on the coach saw the coach and “walked-in” without an appointment

## Patient Satisfaction Surveys

- All completed surveys were scored 4 or higher ( 1 is lowest & 5 is highest)
- Many wrote on the surveys that ease of access provided by the coach inspired them to obtain their overdue mammogram

## Program Costs

- In first 13 months, our mobile program required 960 patients to cover program costs
- 1253 patients were examined (131% of break-even number)

## In first 13 months of Mobile Program:

- 1253 women were screened on the coach
- 8816 women were screened at our hospital's breast imaging center
- Addition of the mobile coach increased our screening mammography volume by 14.2%.

## Conclusions

- The mobile mammography program is a success!
- The program achieved its mission of increasing compliance with screening mammography guidelines, while meeting program costs, & led to the diagnosis of 7 breast cancers.

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